

activation of the gene promoter of conductin, or through stabilizing the mRNA of conductin. ~~Through the activity increases the concentration of  $\beta$ -catenin is decreased in the cells.~~ This blocks the Wnt/Wingless signal path which plays a role in the formation of tumors. Thus conductin acts as a regulator of the  $\beta$ -catenin for tumor suppression. The object of the invention is a gene which codes for conductin and the encoded protein, and the present invention explains the function of conductin.

In principle all tumors in which  $\beta$ -catenin has a basic role can be treated with conductin. The present invention deals with the interaction between conductin and the tumor suppressor gene Anenomatosis Polyposi Coli (APC) in the formation of colon cancer and this defines the utility of conductin for the treatment of colon cancer.

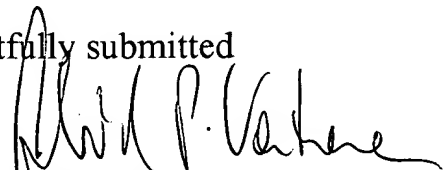
Both the conductin amino acid sequence, and the cDNA-sequence thereof are a part of this application. A person skilled in the art can synthesize conductin or parts thereof from the disclosed sequence and furthermore exchange individual bases which results in substitution of amino acids. The biological activity of the synthesized nucleotides or proteins can then be checked out e.g. using the ELISA technique. (Variants, mutants, and parts of conductin which have the same biological activity can be determined without undue experimentation and are a part of the invention.) The ELISA method is a well known standard technique in clinical laboratories. And is described in numerous scientific publications. For example, an abstract of such a description of the technique is enclosed herewith.

In view of the foregoing amendment and associated remarks, the reconsideration of the outstanding rejection, and the allowance of claims 33 and 34, are respectfully urged.

Respectfully submitted

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It is hereby certified that this is being mailed, as addressed above, on November 7, 2002.



Claim comparison page

--33. [Substantially pure conductin, its] Conductin, and variations, mutants and parts thereof which have the same biological activity as conductin .--

--34. The [substantially pure] conductin of claim 33 of the amino acid sequence 1 to 840 of [Sequence] SEQ ID No. 1 [and Fig. 1].--